Claims

What is claimed is:

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1. A method for use in a mobile user station of a packet-based multiaccess communications system, comprising the steps of:

assigning an address to the mobile user station, the address being a combination of an identifier of the mobile user station and an identifier of a network node in the communications system with which the mobile user station is currently associated; and

transferring packets to and from the mobile user station in accordance with the address.

- 2. The method of Claim 1, further comprising the step of assigning another address to the mobile user station when the station becomes associated with another network node of the communications system, the new address being a combination of the identifier of the mobile user station and an identifier of the new network node.
- 3. The method of Claim 1, wherein the identifier of the mobile user station is a medium access control address of the station.
- 4. The method of Claim 1, wherein the address of the mobile user station further includes an application flow identifier.

5. The method of Claim 4, wherein the address of the mobile user station is a concatenation of the identifiers of the network node, the mobile user station and the application flow.

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Apparatus in a packet-based multiaccess communications system, comprising:

a mobile user station configured to respond to an address assigned to the mobile user station, the address being a combination of an identifier of the mobile user station and an identifier of a network node in the communications system with which the mobile user station is currently associated such that packets are transferred to and from the mobile user station in accordance with the address.

- The apparatus of Claim 6, wherein the mobile user station is further configured to 7. respond to another address assigned to the mobile user station when the station becomes associated with another network node of the communications system, the new address being a combination of the identifier of the phobile user station and an identifier of the new network node.
- The apparatus of Claim 6, wherein the identifier of the mobile user station is a medium 8. access control address of the station.
- The apparatus of Claim 6, wherein the address of the mobile user station further includes 9. an application flow identifier.
- The apparatus of Claim 9, wherein the address of the mobile user station is a 10. concatenation of the identifiers of the network node, the mobile user station and the application flow.
- The apparatus of Claim 1, wherein the mobile user station is further configured for **J**1. supporting a protocol layer, the protocol layer being located above a medium access control layer in a protocol stack associated with the communications system and providing support to applications associated with the communications system with respect to the mobility of the user station.
- A method for use in a network note of a packet-based multiaccess communications 12. system, comprising the steps of:
 - assigning an address to the network node, the address being a combination of an identifier of the network node and an identifier of an interface associated with the network node; and transferring packets to and from the network node in accordance with the address.

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14. The method of Claim 12, wherein the address of the network node further includes an application flow identifier.

15. The method of Claim 14, wherein the address of the network node is a concatenation of the identifiers of the network node, the interface of the network node and the application flow.

Apparatus in a packet-based multiaccess communications system, comprising:

a network node configured to respond to an address assigned to the network node, the address being a combination of an identifier of the network node and an identifier of an interface associated with the network node such that packets are transferred to and from the network node in accordance with the address.

17. The apparatus of Claim 16, wherein the interface identifier is a data link address.

18. The apparatus of Claim 16, wherein the address of the network node further includes an application flow identifier.

19. The apparatus of Claim 18, wherein the address of the network node is a concatenation of the identifiers of the network node, the interface of the network node and the application flow.

20. The apparatus of Claim 16, wherein the network node is further configured for supporting a protocol layer, the protocol layer being located above a medium access control layer in a protocol stack associated with the communications system and providing support to applications associated with the communications system with respect to mobility of a user station.